This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Canceled)
- 2. (**Currently Amended**) The method of claim 10 4 wherein said treatment is decellularization of said tissue, and wherein said treating solution is water, a hypertonic solution or a hypotonic solution, a detergent solution, an enzyme solution or a liquid medium.
- 3. (Canceled)
- 4. (Currently Amended) The method of claim $\underline{10}$ 4 wherein said tissue is irradiated with microwaves at a frequency of 2450 MHz for a net period of time from 1 hour to 1 week.
- 5. (**Currently Amended**) The method of Claim <u>10</u> 1-wherein said native tissue to be treated is soft tissue including vascular vessel, heart valve, heart sac, cornea, amonion and dura.
- 6. (**Currently Amended**) The method of Claim <u>10</u> 4 wherein said native tissue to be treated is hard tissue including bone, cartilage and teeth.
- 7. (**Currently Amended**) The method of Claim <u>10</u> + wherein said native tissue to be treated is an organ or part thereof including heart, kidney, liver, pancreas, brain and part thereof.
- 8. (**Original**) The method of claim 2 further comprising the step of washing said tissue with a fresh washing liquid following said irradiation step to remove destructed donor cells.

- 9. (**Original**) The method of claim 2 wherein said native tissue to be treated has been pre-treated to facilitate the removal of donor cells.
- 10. (**Currently Amended**) A method of <u>decellularizing de-cellularing-native</u> tissue of mammalian origin comprising immersing said tissue in a treating solution, and irradiating the tissue with microwaves while maintaining the temperature of the tissue in the range between O°C and 40°C, whereby said tissue is decellularized.
- 11. (New) The method of claim 10 wherein said tissue is immersed in said treating solution received in a microwave-transmitting container which, is, in turn, in heat-exchange contact with a coolant liquid received in a microwave-transmitting vessel, and wherein said tissue is irradiated with microwaves in a microwave oven while circulating said coolant liquid through a cooling apparatus provided externally of the microwave oven.